## ABSTRACT

A polymeric electrolyte and a lithium battery lithium employing the same . The polymeric electrolyte includes a cross-linked polyether urethane prepared by reacting a prepolymer having a polyethylene oxide backbone and terminated with NCO, with a cross-linking agent, organic solvent and lithium salt. Since the polymeric electrolyte is electrochemically stable, a lithium battery having improved reliability and safety can be obtained by employing the polymeric electrolyte.